



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

AUG - 3 2009

Mr. Michael D. Holland  
United States Department of Energy  
Brookhaven Site Office  
P.O. Box 5000  
Upton, New York 11973

Dear Mr. Holland:

This is in response to your letter dated April 29, 2009, requesting the review and approval of the U.S. Environmental Protection Agency of an application for proposed modification to the Brookhaven LINAC Isotope Producer (BLIP) stack and emissions monitoring systems, in accordance with 40 CFR 61.07.

The application dated April 22, 2009, proposes to replace the existing 12-inch diameter stack with a 6-in diameter stack and to meet the requirements of ANSI-1999, *Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stacks and Ducts of Nuclear Facilities*. In addition, BNL provided responses to questions concerning the installation of the sampling probe and the estimated source term by emails dated July 27 and July 28, 2009, respectively.

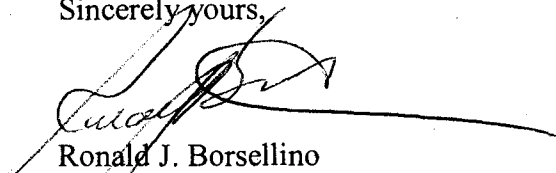
As noted in the BNL annual reports submitted under National Emission Standards for Hazardous Air Pollutants Radionuclides (rad-NESHAPs), 40 CFR 61 Subpart H, and in response to the July 28 email, the yearly doses to any member of the public from BLIP emissions have not exceeded 1% of the rad-NESHAP standard of 10 mrem per year. As a result, the requested replacement of the existing stack is compliant with 40 CFR 61.96.

The following application to construct/modify is hereby approved:

BNL-2009-01

Brookhaven LINAC Isotope Producer (BLIP)

Sincerely yours,

  
Ronald J. Borsellino  
Acting Division Director  
Division of Environmental Planning and Protection

c: J. Granzen, DOE-BNL  
B. Hooda, BSA

BNL-2009001  
Brookhaven Linac Isotope Producer (BLIP)  
Approval to Construct/Modify  
Sources of Airborne Radionuclide Emissions

In compliance with provisions of the Clean Air Act, as amended (42 USC §7401 et seq.) the Department of Energy Brookhaven National Laboratory Site Office is granted approval to construct/modify sources BNL-2009-01, located at the Brookhaven National Laboratory in Upton, New York. The approval is granted in accordance with the plans and materials submitted with the application and with the Federal Regulations governing the National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61), Subpart H. Any conditions attached to this document are considered part of this approval.

Failure to comply with the conditions or terms set forth in this approval may result in sanctions available under the authority of Section 1-604 of Executive Order 12088 as well as enforcement procedures established by the Clean Air Act.

This approval to construct/modify grants no relief from the responsibility for compliance with other applicable provisions of Federal regulations. This approval shall be effective immediately after receipt of the approval to construct/modify by the applicant.

Dated

8/3/09

  
\_\_\_\_\_  
Acting Director,  
Division of Environmental Planning and Protection

## CONDITIONS

### I. Emergency Notification

- A. In the event of an accidental/unplanned release of radionuclides which leads to an air emission that may cause the standards of 40 CFR 61 to be exceeded; or may result in a health threat to the public; the Department of Energy (DOE) Brookhaven (BNL) Site Office shall make timely notification to state, local, and Federal agencies.
- B. Initial phone notification should include the time of the accidental release; location of accident/release; estimate of quantity released; emergency steps taken to contain/control the release; type of assistance needed; and the name and title of person reporting the incident. A brief written summary of the event shall be submitted to Director, Division of Environmental Planning and Protection (Attn: Regional Radiation Program Manager) within 30 days of the event.
- C. EPA Phone Notification - In Order of Preference
  - 1. Regional Radiation Program Manager  
Paul A. Giardina  
212-637-4010
  - 2. Health Physicist  
Jeanette Eng  
212-637-3765
  - 3. National Response Center  
800-424-8802
- D. New York State Phone Notification - In Order of Preference
  - 1. NYS Department of Health  
Director, Bureau of Environmental Radiation Protection  
Stephen Gavitt  
518-402-7550
  - 2. NYS Department of Environmental Conservation  
Chief, Radiation Sites Section  
Tim Rice  
518-402-8579
  - 3. New York State Warning Point  
518-457-2200

### II. Permit Expiration

- A. Approval to construct/modify is not transferable to another owner/operator.
- B. The DOE may submit to the Regional Administrator (Region 2 Environmental Planning and Protection Division Director) a written application for a determination

of whether actions intended to be taken by the DOE/BNL Office constitutes a modification or construction of a source subject to the standard. The Regional Administrator will notify the owner/operator of his determination within 30 days after sufficient information to evaluate the application (40 CFR 61.06).

- C. If intended actions to be taken by the BNL are determined to constitute construction/modification which effects existing permitted sources, the permit and conditions shall supersede and/or amend the existing permit.
- D. Updates in notification and phone contacts will not affect the other conditions of approval.

### III. Notification of Startup

The owner/operator of each stationary source shall provide written notification to EPA Region 2 as follows.

- 1. The 30-60 day notification required for the BNL-2009-01 sources (BLIP) is waived.
- 2. Notifications of the BNL-2009-01 source startups are waived.
- 3. In lieu of notification requirements 1 and 2 above, BNL shall maintain records of BLIP source term and monitoring of airborne emissions during operations. A summary of BLIP usage and emissions shall be included in BNL's yearly report of emissions which is submitted to EPA. A copy of this report shall be submitted directly to EPA Region 2.

### IV. Operations/Maintenance

- A. Operations, testing and maintenance described in the application and associated correspondence shall apply.
- B. The facility owner/operation shall maintain all equipment, facilities, and systems installed or used to achieve compliance with the standard (40 CFR 61.92) in accordance with 40 CFR 61 Subpart H, your application and associated correspondence, and in a manner consistent with good air pollution control practices for minimizing emissions.
- C. Records of operations, maintenance, inspection, testing, repair, monitoring data, and Standard Operating Procedures for conducting such activities shall be maintained pursuant to 40 CFR 61.12(c) and provided to EPA Region 2 upon request.
- D. Correspondence associated with BNL-2009-01
  - a. April 29, 2009, M.C. Holland to P.A. Giardina, "Brookhaven National Laboratory (BNL) Radionuclide Emissions, 40 CFR Part 61 Subpart H – National Emissions

Standards for Hazardous Air Pollutants (NESHAPs), Application for Brookhaven LINAC Isotope Producer (BLIP)

- b. January 15, 2008, M.C. Holland to P.A. Giardina, "Brookhaven National Laboratory (BNL) Radionuclide Emissions, 40 CFR Part 61 Subpart H – National Emissions Standards for Hazardous Air Pollutants (NESHAPs), Authorization for Brookhaven LINAC Isotope Producer (BLIP) Facility to Increase Operating Hours
- c. September 25, 2008, P.A. Giardina to M.C. Holland, approval to increase operating hours.

V. Severability

The provisions of this approval to construct/modify are severable, and, if any provision of this approval to construct/modify is held invalid, the remainder of this approval to construct/modify shall not be affected thereby.

VI. Other Applicable Regulations

The owner/operator shall construct and operate the source in compliance with all other applicable provisions of 40 CFR 52, 60, and 61.

VI. Agency Notification

All correspondence as required by this approval to construct/modify shall be sent to:

U.S. Environmental Protection Agency  
Director, Division of Environmental Planning & Protection  
Attention: Regional Radiation Program Manager  
290 Broadway  
New York, NY 10007